ABSTRACT OF THE DISCLOSURE

A method for arithmetic performance attribution which accurately links single-period attribution effects over multiple periods. In preferred embodiments, the method determines portfolio relative performance over multiple time periods $(t = 1,2,\ldots,T)$ as a sum of terms of form $R - \overline{R} = \sum_{it} \left[c_1 a_{it} + c_2 a_{it}^2 \right]$, where a_{it} is a component of active return for period t, the summation over index i is a summation over all components a_{it} for period t, R is $R = [\prod_{t=1}^{T}(1+R_t)] - 1$, $\overline{R}$ is $\overline{R} = [\prod_{t=1}^{T}(1+\overline{R}_t)] - 1$, R_t is a portfolio return for period t, $\overline{R}_t$ is a benchmark return for period t, and the coefficients c_1 and c_2 are $c_1 = A$, and $c_2 = \left[\frac{R - \overline{R} - A\sum_{jt} a_{jt}}{\sum_{jt} a_{jt}^2} \right]$. More generally, the invention is an arithmetic method for determining portfolio relative performance over multiple time periods $(t = 1,2,\ldots,T)$ as a sum of terms of form: $R - \overline{R} = \sum_{it}\sum_{k=1}^{\infty} c_k a_{it}^k$, where a_{it} is a component of active return for period t. In preferred quadratic implementations (in which the only nonzero coefficients c_k are those for which $k = 1$ or $k = 2$), the coefficients c_1 and c_2 are defined as in the above-mentioned preferred embodiments. In all embodiments, the method of the invention is metric preserving at the component portfolio level. Other aspects of the invention are a computer system programmed to perform any embodiment of the inventive method, and a computer readable medium which stores code for implementing any embodiment of the inventive method.